IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Vanita Mani et al.	§	Group Art Unit: 1792
Serial No.: 10/676,903	§	Confirmation No.: 8076
Filed: October 1, 2003	§	Examiner: Patel, Rita Ramesh
For: INTEGRAL LAUNDRY CLEANING AND DRYING SYSTEM AND METHOD	§	Atty. Docket: 123860-1/SWA GERD:0040

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September 4, 2008	/Tait R. Swanson/
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APPEAL BRIEF PURSUANT TO 37 C.F.R. §§ 41.31 AND 41.37

Appellants hereby electronically file this Appeal Brief in furtherance to the Notice of Appeal and Pre-Appeal Brief Request for Review electronically filed on July 16, 2008, and the Notice of Panel Decision from Pre-Appeal Brief Review mailed on July 31, 2008.

The Commissioner is authorized to charge the requisite fee of $510.00 for this Appeal Brief, and any additional fees which may be necessary to advance prosecution of the present application, to Deposit Account No. 07-0868, Order No. 123860-1/SWA (GERD:0040).

1. REAL PARTY IN INTEREST

The real party in interest is General Electric Company, the Assignee of the above-referenced application by virtue of the Assignment to General Electric Company by Vanita Mani, Darren L. Hallman, and Olga K. Zhushma, recorded at reel 014570, frame 0287, and dated October 1, 2003. Accordingly, General Electric Company, as the Assignee of the above-referenced application, will be directly affected by the Board's decision in the pending Appeal.

2. RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any other appeals or interferences related to this Appeal. The undersigned is the Appellants' legal representative in this Appeal.

3. STATUS OF CLAIMS

Claims 1, 3-9, 11-27, 29-33, 70-83, and 85-86 are currently pending, and claims 2, 10, 28, 34-69, and 84 are cancelled. Claims 16-27, 29-33, 80-83, and 85 are withdrawn. Claims 1, 3-9, 11-15, 70-79, and 86 are currently under final rejection and, thus, are the subject of this Appeal.

4. STATUS OF AMENDMENTS

Appellants did not submit any amendments in response to the Final Office Action mailed on June 2, 2008. Thus, there are no outstanding amendments for consideration by the Board.

5. SUMMARY OF CLAIMED SUBJECT MATTER

The present application contains independent claims 1, 16, 27, 80, and 83. However, independent claims 16, 27, 80, and 83 are currently withdrawn from consideration. Thus, only independent claim 1 and its dependent claims are the subject of this appeal.

With regard to the embodiment of the invention set forth in independent claim 1, discussions of the recited features of claim 1 can be found at least in the below cited locations of the specification and drawings. Independent claim 1 includes a home laundry machine (e.g., 10, 200, 500), comprising: a laundry enclosure (e.g., 12, 202, 556) adapted to clean laundry (e.g., 50, 204) in a cleaning fluid (e.g., 68, 208). *See, e.g.,* Published Application, FIGS. 2-5, 7, 8, and 12; paragraphs [0017], [0018], [0020] - [0022], [0024], [0026], [0029], [0045], [0046], [0049], [0050], and [0051]. The home laundry machine (e.g., 10, 200, 500) also includes a drying mechanism (e.g., 52, 206, 310) pneumatically coupled to the laundry enclosure (e.g., 12, 202, 556) via an air inlet (e.g., 100, 246) and an air outlet (e.g., 102, 248). *See, e.g.,* Published Application, FIGS. 2-5, 7, 8, and 12; paragraphs [0021], [0028] - [0030], and [0042]. The drying mechanism (e.g., 52, 206, 310) comprises a vapor compression cycle system (e.g., 258) comprising a condenser (e.g., 260), an evaporator (e.g., 262), and a compressor (e.g., 264) disposed in a closed fluid path (e.g., 268, 270, 272, 274). *See, e.g.,* Published Application, FIGS. 4 and 5; paragraphs [0008], [0009], [0020], [0031] - [0035]. The condenser (e.g., 260) is configured to heat air upstream of the air inlet (e.g., 100, 246), and the evaporator (e.g., 262) is configured to cool air downstream of the air outlet (e.g., 102, 248). *See, e.g.,* Published Application, FIGS. 4 and 5; paragraphs [0031] - [0035].

6. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

First Ground of Rejection for Review on Appeal:

The Examiner rejected claims 1, 3-5, 7-9, 11-12, 14, 70, 74, and 86 under 35 U.S.C. § 102(b) as being anticipated by Renzacci (U.S. Patent No. 5,887,454, hereinafter "Renzacci").

Second Ground of Rejection for Review on Appeal:

The Examiner rejected claims 13, 15, 71, and 75-79 under 35 U.S.C. § 103(a) as being unpatentable over Renzacci.

Third Ground of Rejection for Review on Appeal:

The Examiner rejected claims 6, 72, and 73 under 35 U.S.C. § 103(a) as being unpatentable over Renzacci as applied to claims above, and further in view of Berndt et al. (U.S. Patent No. 6,059,845, hereinafter "Berndt").

7. ARGUMENT

As discussed in detail below, the Examiner has improperly rejected the pending claims. Further, the Examiner has misapplied long-standing and binding legal precedents and principles in rejecting the claims under Sections 102 and 103. Accordingly, Appellants respectfully request full and favorable consideration by the Board, as Appellants strongly believe that claims 1, 3-9, 11-15, 70-79, and 86 are currently in condition for allowance.

A. First Ground of Rejection:

The Examiner rejected claims 1, 3-5, 7-9, 11-12, 14, 70, 74, and 86 under 35 U.S.C. § 102(b) as being anticipated by Renzacci. Appellants respectfully traverse this rejection.

Legal Precedent and Guidelines

Anticipation under section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under section 102, a single reference must teach each and every limitation of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Accordingly, Applicants need only point to a single element not found in the cited

reference to demonstrate that the cited reference fails to anticipate the claimed subject matter. The prior art reference also must show the *identical* invention "*in as complete detail as contained in the ... claim*" to support a *prima facie* case of anticipation. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir. 1989).

The Renzacci reference is missing features recited by independent claim 1.

Turning to the claims, the present independent claim 1 recites, *inter alia*, "a drying mechanism pneumatically coupled to the laundry enclosure via an air inlet and an air outlet, comprising: a vapor compression cycle system comprising a condenser, an evaporator, and a compressor disposed in a closed fluid path, wherein the condenser is configured to heat air upstream of the air inlet; and wherein the evaporator is configured to cool air downstream of the air outlet."

The Renzacci reference does not teach or suggest the foregoing claim features, e.g., both a condenser and an evaporator of a vapor compression cycle system configured to heat air and cool air, respectively. In the Final Office Action, the Examiner appears to interpret the condenser 26 as the claimed condenser and the cooling unit 7 as the claimed evaporator. *See* Final Office Action, pages 2-3. The Examiner stated: "per the Renzacci reference the condenser 26 is a condenser and thus reads on claims wherein a condenser if configured to heat; the cooling unit 7 performs cooling functions and thus reads on claims wherein an evaporator is configured to cool." Final Office Action, pages 2-3 (emphasis added). As discussed below, the Renzacci reference does not teach or suggest an evaporator as the cooling unit 7. Appellants performed a word search of the Renzacci reference, and found absolutely no instances of the terms evaporator and evaporate anywhere in the text. The Examiner also stated "Renzacci teaches a heat exchanger 15 is installed in the drying air circuit downstream from preheating unit 19 (supplemental heating device) and cooling unit 7 (cooling device)." Final Office Action, page 3. The Examiner did not specifically address the "vapor compression cycle system" and the

"closed fluid path" as recited in claim 1. Furthermore, the Examiner did not specifically address "the condenser is configured to heat air" and "the evaporator is configured to cool air" as recited in claim 1. As discussed below, these claim features are clearly missing from the Renzacci reference.

Appellants submit that the Examiner does not fully understand the elements recited in the present claims. Although Appellants do not intend or suggest that the specification should be read into the present claims, Appellants submit that the specification may be used as a reference to better understand the claimed subject matter. In particularly, Appellants stress that the Renzacci reference, and the Examiner's rejection, both fail to address the vapor compression cycle system as recited in claim 1. The original specification discloses:

> [0031] FIG. 4 is a block diagram illustrating an alternative embodiment of the integral laundry washing and drying system 200 in accordance with certain embodiments of the present technique. As illustrated, the system 200 comprises the laundry enclosure 202, the closed loop washing system 204 fluidly coupled to the laundry enclosure 202, and the closed loop drying system 206 pneumatically coupled to the laundry enclosure 202. However, in the illustrated embodiment, the closed loop drying system 206 comprises a refrigeration or vapor compression cycle system 258 having a condenser 260, an evaporator 262, a compressor 264, and a pressure reducing device 266 coupled together by a closed loop conduit, as indicated by arrows 268, 270, 272, and 274. In operation of the closed loop drying system 206, the condenser 260 functions as the heating device 232, while the evaporator 262 functions as the cooling device 234.
>
> [0032] Turning specifically to the vapor compression cycle system 258, the compressor 264 compresses a working fluid (e.g., a refrigerant such as fluorocarbon R-22) in the vapor phase, thereby causing the temperature of the working fluid to increase to a relatively high temperature. The vapor compression cycle system 258 then circulates the hot, high-pressure working fluid through the condenser 260 (e.g., condenser coils), which transfers heat from the working fluid into the airflow 244 of the closed loop drying system 206. As a result of the heat transfer in the condenser 260, the working fluid condenses from a vapor to liquid. The vapor compression cycle system 258 then passes the working fluid through the pressure reducing device 266 (e.g., throttling valve), which substantially

> reduces the pressure and the temperature of the working fluid. The cool, low-pressure working fluid then enters the evaporator 262 (e.g., evaporator coils), which transfers heat into the working fluid from the heated airflow 250 of the closed loop drying system 206. As a result of the heat transfer in the evaporator 262, the working fluid evaporates or changes state from a saturated mixture of liquid and vapor into a superheated vapor.

Published Application, paragraphs [0031] and [0032] (emphasis added). The passages above further emphasize the deficiencies of the Examiner's rejections, as these passages are clearly consistent with the claim language and contrastingly different than the Renzacci reference. In the Final Office Action, the Examiner cites elements that are not identical to the claimed subject matter. As discussed below, any reasonable reading of the Renzacci reference cannot support a *prima facie* case of anticipation of the present claims.

First, Appellants stress that the Renzacci reference fails to teach or suggest, *inter alia*, "a vapor compression cycle system comprising a condenser, an evaporator, and a compressor disposed in a closed fluid path, wherein the condenser is configured to heat air upstream of the air inlet; and wherein the evaporator is configured to cool air downstream of the air outlet," as recited by independent claim 1. As noted above, Appellants performed a word search of the Renzacci reference, and found absolutely no instances of the terms evaporator and evaporate anywhere in the text. In the Final Office Action, the Examiner equated the cooling unit 7 with the claimed evaporator, yet the Renzacci reference does not support this reading of the cooling unit 7. The Renzacci reference merely discloses that the cooling unit 7 cools the air, yet it does not disclose an evaporator as the cooling unit 7. *See* Renzacci, col. 1, lines 58-60. For at least these reasons, among others, the Renzacci reference cannot anticipate independent claim 1 and its dependent claims.

Second, for sake of hypothetical argument, if the condenser 26 is interpreted as the claimed condenser and if the cooling unit 7 is interpreted as the claimed evaporator as

suggested by the Examiner, then the Renzacci reference fails to teach or suggest these elements 7 and 26 as part of a vapor compression cycle system and a closed fluid path. As illustrated in FIG. 1, the Renzacci reference illustrates the cooling unit 7 as part of the drying air circulation system 4, whereas the condenser 26 is part of the solvent distillation system. The cooling unit 7 is simply not connected to a closed fluid path with the condenser 26. In fact, the cooling unit 7 is not even disclosed as an evaporator, a suggested by the Examiner. As illustrated in FIG. 1 and disclosed by the Renzacci reference, the cooling unit 7 is not part of the solvent distillation system and, thus, cannot possibly be interpreted as part of a vapor compression cycle system. Furthermore, the condenser 26 of the Renzacci reference is completely isolated from the drying air circulation system 4, such that it cannot possibly be interpreted to heat air upstream from the air inlet, as recited by claim 1. For at least these reasons, among others, the Renzacci reference cannot anticipate independent claim 1 and its dependent claims.

Third, for sake of hypothetical argument, if the air pre-heating unit 19 is interpreted as the claimed condenser and if the cooling unit 7 is interpreted as the claimed evaporator, then the Renzacci reference fails to teach or suggest these elements 7 and 19 as part of a vapor compression cycle system and a closed fluid path. Again, the Renzacci reference does not teach or suggest any closed fluid path including these elements 7 and 19, much less a vapor compression cycle system with these elements 7 and 19. Furthermore, the Renzacci reference does not teach or suggest that the air pre-heating unit 19 could be an evaporator, nor does the Renzacci reference teach or suggest that the cooling unit 7 could be a condenser. These claim features are clearly missing from the Renzacci reference. For at least these reasons, among others, the Renzacci reference cannot anticipate independent claim 1 and its dependent claims.

In summary, despite various hypothetical interpretations of the Renzacci reference, the features recited above are clearly missing. Again, the Renzacci reference fails to teach or suggest "a drying mechanism pneumatically coupled to the laundry

enclosure via an air inlet and an air outlet, comprising: a vapor compression cycle system comprising a condenser, an evaporator, and a compressor disposed in a closed fluid path, wherein the condenser is configured to heat air upstream of the air inlet; and wherein the evaporator is configured to cool air downstream of the air outlet."

B. **Second Ground of Rejection:**

The Examiner rejected claims 13, 15, 71, and 75-79 under 35 U.S.C. § 103(a) as being unpatentable over Renzacci. Appellants respectfully traverse these rejections. As discussed above, the Renzacci fails to teach or suggest various features recited by independent claim 1. Claims 13, 15, 71, and 75-79 depend from independent claim 1, and are believed to be allowable for at least the same reasons as discussed above with reference to claim 1. According, Appellants respectfully request withdrawal of the foregoing rejections under Section 103.

Legal Precedent and Guidelines

The pending claims must be given an interpretation that is reasonable and consistent with the *specification*. *See In re Prater*, 415 F.2d 1393, 1404-05, 162 U.S.P.Q. 541, 550-51 (C.C.P.A. 1969) (emphasis added); *see also In re Morris,* 127 F.3d 1048, 1054-55, 44 U.S.P.Q.2d 1023, 1027-28 (Fed. Cir. 1997); *see also* M.P.E.P. §§ 608.01(o) and 2111. Indeed, the specification is "the primary basis for construing the claims." *See Phillips v. AWH Corp.*, No. 03-1269, -1286, at 13-16 (Fed. Cir. July 12, 2005) (*en banc*). One should rely *heavily* on the written description for guidance as to the meaning of the claims. *See id.*

Interpretation of the claims must also be consistent with the interpretation that *one of ordinary skill in the art* would reach. *See In re Cortright*, 165 F.3d 1353, 1359, 49 U.S.P.Q.2d 1464, 1468 (Fed. Cir. 1999); M.P.E.P. § 2111. "The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation." *See Collegenet, Inc. v. ApplyYourself, Inc.*,

418 F.3d 1225, 75 U.S.P.Q.2d 1733, 1738 (Fed. Cir. 2005) (quoting *Phillips v. AWH Corp.*, 75 U.S.P.Q.2d 1321, 1326). The Federal Circuit has made clear that derivation of a claim term must be based on "usage in the ordinary and accustomed meaning of the words amongst artisans of ordinary skill in the relevant art." *See id.*

The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). In addressing obviousness determinations under 35 U.S.C. § 103, the Supreme Court in *KSR International Co. v. Teleflex Inc.*, No. 04-1350 (April 30, 2007), reaffirmed many of its precedents relating to obviousness including its holding in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). In *Graham*, the Court set out an objective analysis for applying the statutory language of §103:

> Under §103, the scope and content of the prior art are to be determined, differences between the prior art and the claims at issue are to be ascertained, and the level of ordinary skill in the pertinent art are to be resolved. Against this background the obviousness or non-obviousness of the subject matter is to be determined. Such secondary considerations as commercial success, long-felt but unresolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. *KSR*, s*lip op.* at 2 (citing *Graham*, 383 U.S. at 17-18).

In *KSR*, the Court also reaffirmed that "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." *Id.* at 14. In this regard, the *KSR* court stated that "it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does … because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known." *Id.* at 14-15. Traditionally, to establish a *prima facie* case of obviousness, the CCPA and the Federal Circuit have required that the prior art not only include all of the claimed elements, but also some teaching, suggestion, or motivation to

combine the known elements in the same manner set forth in the claim at issue. *See, e.g., ASC Hospital Systems Inc. v. Montifiore Hospital,* 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984) (holding that obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination.); *In re Mills,* 16 U.S.P.Q.2d 1430, 1433 (Fed. Cir. 1990) (holding that the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination). In *KSR*, the court noted that the demonstration of a teaching, suggestion, or motivation to combine provides a "helpful insight" in determining whether claimed subject matter is obvious. *KSR, slip op.* at 14. However, the court rejected a *rigid* application of the "TSM" test. *Id.* at 11. In this regard, the court stated:

> The obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasis on the importance of published articles and explicit content of issued patents. The diversity of inventive pursuit and of modern technology counsels against limiting the analysis in this way. In many fields it may be that there is little discussion of obvious techniques or combinations, and it often may be the case that market demand, rather than scientific literature, will drive design trends. *Id.* at 15.

In other words, the *KSR* court rejected a rigid application of the TSM test which requires that a teaching, suggestion or motivation to combine elements in a particular manner must be explicitly found in the cited prior art. Instead, the *KSR* court favored a more expansive view of the sources of evidence that may be considered in determining an apparent reason to combine known elements by stating:

> Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art all in order to determine whether there was an apparent reason to combine in the known elements in the fashion claimed in the patent at issue. *Id.* at 14.

The *KSR* court also noted that there is not necessarily an inconsistency between the idea underlying the TSM test and the *Graham* analysis, and it further stated that the broader application of the TSM test found in certain Federal Circuit decisions appears to be consistent with *Graham*. *Id.* at 17-18 (citing *DyStar Textilfarben GmbH and Co. v. C.H. Patrick Co.,* 464 F.3d 1356, 1367 (2006) ("Our suggestion test is in actuality quite flexible and not only permits but *requires* consideration of common knowledge and common sense"); *Alza Corp. v. Mylan Labs, Inc.,* 464 F.3d 1286, 1291 (2006) ("There is flexibility in our obviousness jurisprudence because a motivation may be found *implicitly* in the prior art. We do not have a rigid test that requires a teaching to combine … ")).

Furthermore, the *KSR* court did not diminish the requirement for objective evidence of obviousness. *Id.* at 14 ("To facilitate review, this analysis should be made explict. See *In re Kahn,* 441 F.3d 977, 988 (CA Fed. 2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness"). As our precedents make clear, however, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ."); s*ee also, In re Lee,* 61 U.S.P.Q.2d 1430, 1436 (Fed. Cir. 2002) (holding that the factual inquiry whether to combine references must be thorough and searching, and that it must be based on *objective evidence of record*).

When prior art references require a selected combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d

1596 (Fed. Cir. 1988). The Federal Circuit has warned that the Examiner must not, "fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." *In re Dembiczak*, F.3d 994, 999, 50 U.S.P.Q.2d 52 (Fed. Cir. 1999) (quoting *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983)).

It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983); M.P.E.P. § 2145. Moreover, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 U.S.P.Q. 349 (CCPA 1959); *see* M.P.E.P. § 2143.01(VI). If the proposed modification or combination would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984); *see* M.P.E.P. § 2143.01(V).

Renzacci cannot support a prima facie case of obviousness of an airflow control to enable both a closed airflow system and an open airflow system as set forth in dependent claim 71.

Dependent claim 71 recites "an airflow control configured to change the drying mechanism between a closed airflow system and an open airflow system relative to the atmosphere." These claim features are clearly missing from the Renzacci reference. In the Final Office Action, the Examiner did not present any reasoning behind the rejection of dependent claim 71. *See* Final Office Action, pages 4-5. As a result, the Examiner did not make a *prima facie* case of obviousness of dependent claim 71.

Renzacci cannot support a prima facie case of obviousness of the claimed ranges as set forth in dependent claims 75-79.

Dependent claim 75 recites "control parameters having a target heated-air temperature greater than about 100 degrees Fahrenheit for the condenser." Dependent claim 76 recites "control parameters having a target heated-air temperature between approximately 130 and 170 degrees Fahrenheit for the condenser." Dependent claim 77 recites "control parameters having a target cooled-air temperature less than about 70 degrees Fahrenheit for the evaporator." Dependent claim 78 recites "control parameters having a target cooled-air temperature between approximately 50 and 80 degrees Fahrenheit for the evaporator." Dependent claim 79 recites "control parameters having a target airflow rate of about 150 to 300 cubic feet per minute through the laundry enclosure."

The Renzacci reference does not teach or suggest any of the claimed ranges set forth above. In the Final Office Action, the Examiner did not cite any numbers whatsoever, much less a range that could support a *prima facie* case of obviousness of the foregoing dependent claims. *See* Final Office Action, pages 4-5. Section 2144.05 (I) of the Manual of Patent Examining Procedure states the following with regard to obviousness of ranges:

> In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a *prima facie* case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990) (The prior art taught carbon monoxide concentrations of "about 1-5%" while the claim was limited to "more than 5%." The court held that "about 1-5%" allowed for concentrations slightly above 5% thus the ranges overlapped.); *In re Geisler*, 116 F.3d 1465, 1469-71, 43 USPQ2d 1362, 1365-66 (Fed. Cir. 1997) (Claim reciting thickness of a protective layer as falling within a range of "50 to 100 Angstroms" considered *prima facie* obvious in view of prior art reference teaching that "for suitable protection, the thickness of the protective layer should be not less than about 10 nm [i.e., 100 Angstroms]." The court stated that "by stating that 'suitable protection' is provided if the protective layer is 'about' 100 Angstroms thick, [the prior art reference] directly teaches the use of a thickness within [applicant's] claimed range."). Similarly, a *prima facie* case of obviousness exists where

> the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (Court held as proper a rejection of a claim directed to an alloy of "having 0.8% nickel, 0.3% molybdenum, up to 0.1% iron, balance titanium" as obvious over a reference disclosing alloys of 0.75% nickel, 0.25% molybdenum, balance titanium and 0.94% nickel, 0.31% molybdenum, balance titanium.).
>
> "[A] prior art reference that discloses a range encompassing a somewhat narrower claimed range is sufficient to establish a prima facie case of obviousness." *In re Peterson*, 315 F.3d 1325, 1330, 65 USPQ2d 1379, 1382-83 (Fed. Cir. 2003). >See also *In re Harris*, 409 F.3d 1339, 74 USPQ2d 1951 (Fed. Cir. 2005)(claimed alloy held obvious over prior art alloy that taught ranges of weight percentages overlapping, and in most instances completely encompassing, claimed ranges; furthermore, narrower ranges taught by reference overlapped all but one range in claimed invention).< However, if the reference's disclosed range is so broad as to encompass a very large number of possible distinct compositions, this might present a situation analogous to the obviousness of a species when the prior art broadly discloses a genus. *Id.* See also *In re Baird*, 16 F.3d 380, 29 USPQ2d 1550 (Fed. Cir. 1994); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992); MPEP § 2144.08.

In view of the foregoing passages, among others, Appellants stress that the Examiner has not made a *prima facie* case of obviousness of dependent claims 75-79, because the Examiner has not cited to any numbers whatsoever, much less a range that overlaps the claimed ranges. In view of this deficiency, among others, Appellants respectfully request withdrawal of the foregoing rejection of dependent claims 75-79.

C. **Third Ground of Rejection:**

The Examiner also rejected claims 6, 72, and 73 under 35 U.S.C. § 103(a) as being unpatentable over Renzacci as applied to claims above, and further in view of Berndt. Appellants respectfully traverse these rejections. As discussed above, the Renzacci fails to teach or suggest various features recited by independent claim 1. Claims 6, 72, and 73 depend from independent claim 1, and are believed to be allowable for at least the same reasons as discussed above with reference to claim 1. The Berndt

reference does not obviate the deficiencies of the Renzacci reference. As a result, the cited references, taken alone or in hypothetical combination with one another, fail to teach or suggest the features recited in the present claims. According, Appellants respectfully request withdrawal of the foregoing rejections under Section 103.

Renzacci and Berndt, taken alone or in hypothetical combination, cannot support a prima facie case of obviousness of the controls as set forth in dependent claims 72 and 73.

Dependent claim 72 recites "a wash control comprising a plurality of different cleaning fluid selections including a cleaning solvent, a cleaning detergent, and water." Dependent claim 73 recites "a fluid recovery control configured to enable and disable fluid recovery of a cleaning fluid." Appellants stress that the cited references both fail to teach or suggest these claim features. In the Final Office Action, the Examiner merely stated that "[l]aundry machines are commonly known in the art to have cleaning fluid sources to clean items therein as desired; commonly known cleaning fluids are water, cleaning solvents, detergents, fabric softeners, etc." Final Office Action, page 6. Although Appellants do not necessarily agree with the Examiner's position regarding "well known" features, Appellants stress that the Examiner's rejection does not even address the recitations set forth in the claims. Furthermore, even if different cleaning fluids mutually exclusively exist in different laundry machines, it does not necessarily follow that any one particular machine would provide "a wash control comprising a plurality of different cleaning fluid selections including a cleaning solvent, a cleaning detergent, and water," as recited by dependent claim 72. Likewise, even if different laundry machines mutually exclusively use either a fluid recovery system or no fluid recover system, it does not necessarily follow that any one particular machine would provide "a fluid recovery control configured to enable and disable fluid recovery of a cleaning fluid," as recited by dependent claim 73. According, Appellants respectfully request withdrawal of the foregoing rejections under Section 103.

Conclusion

In view of the arguments presented herein, Appellants respectfully submit that all pending claims are in condition for allowance. However, if the Examiner or the Board wishes to resolve any other issues by way of a telephonic conference, the Examiner or Board is kindly invited to contact the undersigned attorney at the telephone number listed below.

Respectfully submitted,

Date: September 4, 2008

/Tait R. Swanson/

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8. APPENDIX OF CLAIMS ON APPEAL

1. A home laundry machine, comprising:

a laundry enclosure adapted to clean laundry in a cleaning fluid; and

a drying mechanism pneumatically coupled to the laundry enclosure via an air inlet and an air outlet, comprising:

a vapor compression cycle system comprising a condenser, an evaporator, and a compressor disposed in a closed fluid path,

wherein the condenser is configured to heat air upstream of the air inlet; and

wherein the evaporator is configured to cool air downstream of the air outlet.

3. The home laundry machine of claim 1, wherein the drying mechanism is adapted to recapture a desired portion of the cleaning fluid.

4. The home laundry machine of claim 3, wherein the desired portion comprises a cleaning solvent.

5. The home laundry machine of claim 1, comprising a cleaning solvent tank coupled to the laundry enclosure.

6. The home laundry machine of claim 5, wherein the cleaning solvent tank retains a cleaning solvent comprising a siloxane.

7. The home laundry machine of claim 1, comprising an air conduit extending from the air outlet to the air inlet.

8. The home laundry machine of claim 7, comprising a blowing device adapted to flow air through a pneumatically closed air pathway extending through the air conduit,

into the laundry enclosure from the air inlet, and out of the laundry enclosure through the air outlet.

9. The home laundry machine of claim 1, comprising a condensate drain disposed adjacent the cooling device and coupled to a fluid recovery system.

11. The home laundry machine of claim 1, wherein vapor compression cycle comprises a pressure reducing mechanism.

12. The home laundry machine of claim 1, comprising an agitation device coupled to the laundry enclosure.

13. The home laundry machine of claim 12, wherein the agitation device comprises a motor having a rotational shaft coupled to a rotational axis of the laundry enclosure.

14. The home laundry machine of claim 1, wherein the laundry enclosure is side-loadable.

15. The home laundry machine of claim 1, wherein the laundry enclosure is top-loadable.

70. The home laundry machine of claim 1, comprising a supplemental heating device configured to heat air upstream of the air inlet to supplement the heat provided by the condenser.

71. The home laundry machine of claim 1, comprising an airflow control configured to change the drying mechanism between a closed airflow system and an open airflow system relative to the atmosphere.

72. The home laundry machine of claim 1, comprising a wash control comprising a plurality of different cleaning fluid selections including a cleaning solvent, a cleaning detergent, and water.

73. The home laundry machine of claim 1, comprising a fluid recovery control configured to enable and disable fluid recovery of a cleaning fluid.

74. The home laundry machine of claim 1, comprising a fluid drain configured to drain waste water and a fluid recovery system configured to recapture a cleaning solvent.

75. The home laundry machine of claim 1, comprising control parameters having a target heated-air temperature greater than about 100 degrees Fahrenheit for the condenser.

76. The home laundry machine of claim 1, comprising control parameters having a target heated-air temperature between approximately 130 and 170 degrees Fahrenheit for the condenser.

77. The home laundry machine of claim 1, comprising control parameters having a target cooled-air temperature less than about 70 degrees Fahrenheit for the evaporator.

78. The home laundry machine of claim 1, comprising control parameters having a target cooled-air temperature between approximately 50 and 80 degrees Fahrenheit for the evaporator.

79. The home laundry machine of claim 1, comprising control parameters having a target airflow rate of about 150 to 300 cubic feet per minute through the laundry enclosure.

86. The home laundry machine of claim 1, wherein the condenser and the evaporator are both disposed in an air path between the air inlet and the air outlet.

9. **APPENDIX OF EVIDENCE**

None

10. **APPENDIX OF RELATED PROCEEDINGS**

None.